

TECHNICAL DATASHEET

CNC Travelling Column Machining center *partially refurbished*

manufacturer	SORALUCE
type	FL-Center 6000
control	HEIDENHAIN iTNC 530
built	2006



Picture before refurbishing

Travels

Longitudinal movement (X-axis)	5.500 mm
Cross movement (Y-axis)	1.000 mm
Vertical movement (Z-axis)	1.400 mm

Clamping table

Clamping surface	6.000 x 1.200 mm
Max. work piece weight	13.500 kg
Number of T-slots	12 St.
Size of T-slots	22 mm
Spacing of the T-slots	100 mm

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SORALUCE FL-Center 6000

NC-rotary table

position	Right, flush integrated in table surface	
Calmping surface	Ø 1.000	mm
Positioning accuracy	360 x 0,001	°
Max. Workpiece weight	3.500	kg
Number of T-slots	9	St.
Size of the T-slots	22	mm
Distance between the T-slots	100	mm

Feeds

X-, Y- and Z-axis, stepless	2 - 10.000	mm/min.
Rapid feed X / Y / Z	25.000	mm/min
Max. feed forces X-Y-Z axis	10.000	N

Universal-NC-Milling head

Swivelling front/rear plane	automatic	
Indexing	0,001 x 0,001	° stepless
Const. Power at 100 % ED	28	kW
Speed range, infinitely variable	15 - 5.000	min-1
Max. torque	815	Nm
Tool holder	SK50	DIN 69871AD
Internal coolant supply	Through the spindle centre	

Guides, drive and measuring systems

- All axis drives with digital drives manufacturer HEIDENHAIN
- Direct measuring systems for X,Y, and Z axis manufacturer HEIDENHAIN
- X-, Y- and Z-axis guidance using high-precision linear guides for maximum precision and dynamics
- Drive of the travelling column in the X-axis by means of a gear rack: Two servomotors with reduction gears and helical pinions engage directly with the gear rack on the substructure.
- Precision ball screw spindles with preloaded nuts for Y- and Z-axis

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Automatic Tool Changer ATC

Tool places	80	places	
Tool diam. max	125/250	mm	Next place free/occupied
Tool length max..	400	mm	
Tool weight max.	20	kg	
Change position on the head	Vertical / horizontal		
Separate tool shuttle for short distances and fast exchange times			

Coolant equipment with band filter

- Two cooling circuits for internal and external cooling
- Frequency-controlled high-pressure pump for internal coolant supply, max. 70 bar
- Tank volume approx. 1,500 l
- Paper belt filter system with automatic feed
- Chip flushing

Measurement, weight

Floor space required	ca. 11,0 x 5,6	m
Machine height	ca. 3,5	m
Machine weight	ca. 35.000	kg

cnc-control HEIDENHAIN iTNC 530

Digital numerical sequence control, including digital drive control, hard disk memory, 15" TFT colour screen

Machining cycles:

Standard drilling and milling cycles, deep drilling, thread cutting with and without compensating chuck, milling of slots, rectangular and circular pockets, rectangular and circular journals, boring, drilling milling (helical path), milling to line, drilling patterns, head swivelling, reverse countersinking, shifting and/or rotation of the coordinate system, mirroring, dimension factor also axis-specific, Linear interpolation on 3 axes, circular interpolation on 2 axes and on 3 axes with rotated working plane, swivelling working plane

Electrical supply data

Operating voltage	3 x 400	V
Operating frequency	50	Hz
Connected load	64	kVA
Connection cross-section	50	mm ²

Equipment / Accessories

- Universal milling head, 28kW, infinitely variable, positioning via internal Hirth serration
- 28kW, spindle speed max. 5,000 min⁻¹
- CNC control HEIDENHAIN iTNC 530
- Electronic radio handwheel HBG 410RF
- Integrated NC rotary table Ø 1,000 mm
- Full 5-sided machining possible in one set-up
- Movable control panel for machine operation in front of the machine
- Automatic tool changer with 80 magazine positions
- Coolant system with a capacity of 1,500 litres and internal coolant supply
- Chip conveyor integrated in the work area, ejection on the left
- 2 oil mist extraction systems
- Fully enclosed work area with optimum accessibility thanks to wide-opening, telescopic operator doors
- Steel curtain on both sides in the rear area along the X-axis
- Work area panelling closed on the sides.
- Illumination of the work area
- Prepared for pendulum machining
- Operating mode 4
- Tool centre point optimisation "TCP-Opt" incl. ground precision ball (automatic measurement of head kinematics and compensation within a few minutes)
- Paintwork RAL 7035 light grey / RAL 5011 steel blue
- Ground-level installation possible without foundation

Technical inspection and repair by our own technical team

- Complete cleaning and technical inspection of the machine
- Any visible defects or defective parts found during the inspection will be professionally repaired or replaced by our experienced service team
- New folding bellows and blinds
- Professional re-painting of the machine
- Inspection of integrated rotary table
- Change of recirculating roller bearing carriages with high accuracy and very high pretension setup
- Functional test under power in our showrooms

We supply a fully checked and overhauled machine in mint optical condition